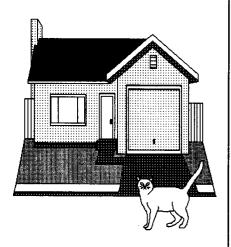


U.S. Army Center for Health Promotion and Preventive Medicine

(Provisional)





- ♦ Home & Pet Owners
- ♦ Rodent Control & Clean-up
- ♦ Pet Protection

Hantavirus

This fact sheet is designed primarily for the rural resident/homeowner. but the methods and facts presented here may be applied to the urban setting as well. In addition, this fact sheet describes various methods of rodent-proofing houses. These methods should be employed to decrease the threat of exposure to the life-threatening disease known as Muerto Canyon virus. Muerto Canyon virus is a virulent strain of Hantavirus which is known to cause an acute illness in man. Illness symptoms are flu-like and may be accompanied by cough. In approximately 60 percent of the reported cases these symptoms have quickly deteriorated to respiratory failure and death. The best protection against the virus is avoidance.

Rodent Reservoir

Muerto Canvon virus was isolated from fatal cases which occurred in Northern New Mexico's "Four Corners" region. The virus is carried in the airborne particles of rodent urine, droppings (feces), and saliva. Normally the rodents are "field rodents" which means they prefer to live outside. However, these same field rodents will move indoors for food, water, and cover. The Deer Mouse appears to be the primary virus reservoir in the United States, but is not the only rodent known to carry the virus. Other rodents that may carry the Hantavirus include squirrels, rats, chipmunks, and

other species of mice. All rodents should be treated as if they might carry the virus. Common sense dictates that it is best to avoid all contact with rodents and their waste products. Ticks, fleas, mosquitoes, chiggers, or other biting insects are not known to play a role in the transmission of Muerto Canyon virus. In addition, birds and reptiles have not been shown to have a role in Hantavirus spread.

Clean & Well Kept

Preventing rodents from entering or living around your home is very important. Keeping your yard free from trash, litter, junk or debris. which attract rodents looking for food, cover, and protection from many predators, is the best way to keep rodents away from your living areas. Keep all trash and garbage in rodent-proof, covered containers. Discouraging rodents around the home also reduces the chances of the family's pet coming into contact with a rodent.

Pet Contact

Cats and dogs have not been shown to spread the Hantavirus from a rodent to a person. However, allowing your dog or cat to roam free increases the chance it may come upon a rodent, kill it and bring it home as a "trophy" (a commonly reported behavior in cats). This indirectly increases the risk of exposure to pet owners. Pets should not be allowed to roam freely - for

their safety and yours. Because of the danger of pets acquiring other wildlife-associated diseases or transmitting these diseases to their owners, pets should always be vaccinated for rabies and regularly treated for fleas (vectors of bubonic plague) and ticks (vectors of Lyme disease and Rocky Mountain Spotted Fever). If pets are allowed to roam, attach a bell to the collar to alert wildlife of the pet's approach.

Rodent Control & Cleanup

Bait spring-loaded traps used for indoor trapping with peanut butter. Once the rodent is trapped, use the following disposal and cleanup guidelines: Always spray disinfectant on dead rodents. traps, nests, droppings, foods or areas where the rodent has been. Liquid bleach (3 tablespoons per gallon of water), Lysol, or any other household disinfectant may be used to kill the virus. After spraying disinfectant, but before starting cleanup procedures, spray the surrounding area with insecticide for any fleas, lice, or ticks. Then, while using rubber gloves or plastic bags over the hands, carefully remove the dead rodent, place it in a plastic bag and seal the bag. Place this bag in another bag and seal again. Dispose of the bagged dead rodent by either burning or burying in a 2- to 3-foot hole. Bury deep enough so pets will not dig it up.

Area Disinfection

Always wear rubber gloves or plastic bags on hands during cleanup of rodent-infested/ contaminated areas. Thoroughly soak snap traps in disinfectant. Rinse, dry and reuse the traps if needed. Spray disinfectant on areas where the rodent was trapped and in areas where rodent activity has been noted (as seen by fecal pellets and urine staining). Soak the traps thoroughly as dying rodents commonly urinate after being trapped. If using disposable gloves, first disinfect, then discard the gloves, and wash hands thoroughly with soap and hot water. When cleaning floors, minimize stirring up the dust (which potentially carries the virus on airborne particles) by first spraying the area with disinfectant, then mopping the floor once or twice with a soap and disinfectant solution.

Research Continues

Research continues to investigate the cause of Muerto Canyon virus and the relationship between rodents and man concerning the virus. As of this writing, there is not enough information available to address with certainty every situation which might be encountered by the homeowner. The relatively low number of individuals reporting Hantavirus infection implies that the disease is difficult to contract. The relative risk factors have not been clearly detailed and will require further research.